IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in the above-referenced application.

1. (Original) A structure comprising:

a semiconductor light emitting device comprising a light emitting layer disposed between an n-type region and a p-type region, the light emitting layer configured to emit light of a first wavelength; and

a cerium-doped garnet phosphor having a cerium concentration between about 4 mol% and about 8 mol%.

2. (Original) The structure of claim 1 wherein the cerium-doped garnet phosphor has a cerium concentration of about 6 mol%.

3. (Original) The structure of claim 1 wherein the cerium-doped garnet phosphor is $(Lu_{1-x-y-a-b}Y_xGd_y)_3(Al_{1-z}Ga_z)_5O_{12}:Ce_aPr_b$ wherein $0 < x < 1$, $0 < y < 1$, $0 < z \leq 0.1$, $0 < a \leq 0.2$ and $0 < b \leq 0.1$.

4. (Original) The structure of claim 1 wherein the cerium-doped garnet phosphor is $Y_3Al_5O_{12}:Ce^{3+}$.

5. (Original) The structure of claim 1 wherein the cerium-doped garnet phosphor is disposed to absorb light of the first wavelength and capable of absorbing light of the first wavelength and emitting light of a second wavelength.

6. (Original) The structure of claim 5 wherein the first wavelength is blue and the second wavelength ranges from green to yellow.

7. (Original) The structure of claim 5 wherein the cerium-doped garnet phosphor is a first wavelength converting material, the structure further comprising a second wavelength-converting material, wherein the second wavelength-converting material is capable of absorbing light of one of the first wavelength and the second wavelength and emitting light of a third wavelength longer than the second wavelength.

8. (Original) The structure of claim 7 wherein the third wavelength is red.

9. (Original) The structure of claim 7 wherein the second wavelength converting material is one of $(Ca_{1-x}Sr_x)S:Eu^{2+}$ wherein $0 < x \leq 1$; $CaS:Eu^{2+}$; $SrS:Eu^{2+}$; $(Sr_{1-x-y}Ba_xCa_y)_{2-z}Si_{5-a}Al_aN_{8-a}O_a:Eu_z^{2+}$ wherein $0 \leq a < 5$, $0 < x \leq 1$, $0 \leq y \leq 1$, and $0 < z \leq 1$; and $Sr_2Si_5N_8:Eu^{2+}$.

10. (Original) The structure of claim 1 wherein the semiconductor light emitting device is a III-nitride light emitting diode.

PATENT LAW GROUP LLP
2635 N. FIRST ST.
SUITE 223
SAN JOSE, CA 95134
(408) 382-0480
FAX (408) 382-0481

11. (Original) The structure of claim 1 wherein the cerium-doped garnet phosphor is coated on a top surface and a side surface of the light emitting device.

12. (Original) The structure of claim 1 further comprising:

a pair of leads electrically connected to the light emitting device; and

a lens disposed over the light emitting device.

13. (Original) The structure of claim 12 wherein the cerium-doped garnet phosphor is dispersed in an encapsulant disposed between the light emitting device and the lens.

14. (Original) The structure of claim 1 wherein the cerium-doped garnet phosphor is spaced apart from the light emitting device.

15. (New) A method comprising:

providing a semiconductor light emitting device comprising a light emitting layer disposed between an n-type region and a p-type region, wherein the light emitting layer is configured to emit light of a first wavelength; and

selecting a cerium concentration in a cerium-doped garnet phosphor such that the phosphor has a broader excitation spectrum than 2 mol% cerium $Y_3Al_5O_{12}:Ce^{3+}$; and

disposing the phosphor in a path of light emitted by the light emitting device.

16. (New) The method of claim 15 wherein selecting a cerium concentration comprises selecting a cerium concentration between about 4 mol% and about 8 mol%.

PATENT LAW
GROUP LLP
2635 N. FIRST ST.
SUITE 223
SAN JOSE, CA 95134
(408) 382-0480
FAX (408) 382-0481